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SEQUENCE LISTING

(1) GENERAL INFORMATION:

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(i) APPLICANT:

Schmutz, Sheila Marie
RR # 2, Box 123
Saskatoon, SK, Canada
S7K 3J5

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Julie Janine Goodall
101B-815 Reid Road,
Saskatoon, SK, Canada
S7N 2W8

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(ii) TITLE OF INVENTION:

Improving Production Characteristics of Cattle

(iii) NUMBER OF SEQUENCES: 3

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(iv) CORRESPONDENCE ADDRESS:

Furman & Kallio

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1400 – 2002 Victoria Avenue

Regina, SK, Canada

S4P 0R7

5 (v) COMPUTER-READABLE FORM:

COMPUTER: Dell Server

OPERATING SYSTEM: Windows XP Professional

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SOFTWARE: Microsoft Word – Office 2004 Version

(vi) CURRENT APPLICATION DATA:

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APPLICATION NUMBER:

FILING DATE:

20 CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

- 40 -

APPLICATION NUMBER: US 60/489,026

FILING DATE: July 23, 2003

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CLASSIFICATION:

(viii) PATENT AGENT INFORMATION:

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a) NAME:

Furman & Kallio

1400 – 2002 Victoria Avenue

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Regina, SK, Canada

S4P 0R7

b) REFERENCE NUMBER: 1709-03-00

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(2) INFORMATION FOR SEQ ID NO: 1

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(i) SEQUENCE CHARACTERISTICS:

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(a) LENGTH: 217 base pairs

(b) TYPE: nucleotide

(c) STRANDEDNESS: double stranded

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(d) TOPOLOGY: linear

(ii) MOLECULE TYPE: genomic DNA

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(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

(vi) ORIGINAL SOURCE: Bos taurus

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(viii) POSITION IN GENOME:

a) CHROMOSOME SEGMENT: BTA 29

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b) MAP POSITION: 0 cM from ILSTS081

c) UNITS: centiMorgans

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(ix) FEATURE:

a) NAME/KEY: SNP-2

b) LOCATION: bp 150

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c) IDENTIFICATION METHOD: DNA sequencing of PCR products

d) OTHER INFORMATION: creates an additional BsrI restriction site; affects birth weight, sex-corrected rib eye area size, fat content and marbling

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(x) PUBLICATION INFORMATION:

a) AUTHORS: Goodall, J.J. and Schmutz, S.M.

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- b) TITLE: Linkage Mapping of IGF2 on Cattle Chromosome 29
- c) JOURNAL: Animal Genetics
- d) VOLUME: 34
- e) ISSUE: 4
- 10
- f) PAGES: 313 – 313
- j) PUBLICATION DATE: August 2003
- 15
- k) RELEVANT RESIDUES IN SEQUENCE ID NO: 2: C or T
residue at position 150

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1

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```
cctcagcctc atccccctcct ttgcctccca gtcaagcctg ctgggggggtc tgagcaccac 61
agccagagca cccccgcctt ggcagcgact gctactattg gccagccag cggatcatcc 121
acctggcagt cgagagcctg gggcaccagy gacgtccagg tcctcttttac ccaccgccca 181
```

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ggggagcttc agagacaaca cagcaaataag agcacag

217

(2) INFORMATION FOR SEQ ID NO: 2

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(i) SEQUENCE CHARACTERISTICS:

(a) LENGTH: 24 nucleotides

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(b) TYPE: nucleotide

(c) STRANDEDNESS: single stranded

(d) TOPOLOGY: linear

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(ii) MOLECULE TYPE: DNA (primer)

(iii) HYPOTHETICAL: no

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(iv) ANTI-SENSE: no

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2

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cctcagcctc atccccctct ttgc

24

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(2) INFORMATION FOR SEQ ID NO: 3

(i) SEQUENCE CHARACTERISTICS:

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(a) LENGTH: 25 nucleotides

(b) TYPE: nucleotide

(c) STRANDEDNESS: single stranded

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(d) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (primer)

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(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3

ctgtgctcta tttgctgtgt tgtct

25

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